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Conservation Service

Salt Lake City



A292.9 So3Wa United States at 3 WATER SUPPLY OUTLOOK Department of Agriculture FOR UTAH

in Cooperation with Utah State **Department of Natural Resources**



T RESIPIE'TS WE WATER SIPPLY OUTLOOF REPORTS:

To t of the mable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, sever 1 minths before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snow elt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are his disprincipally on measurement of the water equivalent of the mountain snowpack.

Firecasts ecome fore accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snov course measurement is obtained by sampling snow depth and water equivalent of surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW SURVEYORS AT MT. ST. HELENS, WASHINGTON.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mexico)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th.St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES:

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 -- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 -- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 -- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR UTAH

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

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STATE CONSERVATIONIST SOIL CONSERVATION SERVICE SALT LAKE CITY, UTAH

In Cooperation with

UTAH STATE DEPT. OF NATURAL RESOURCES

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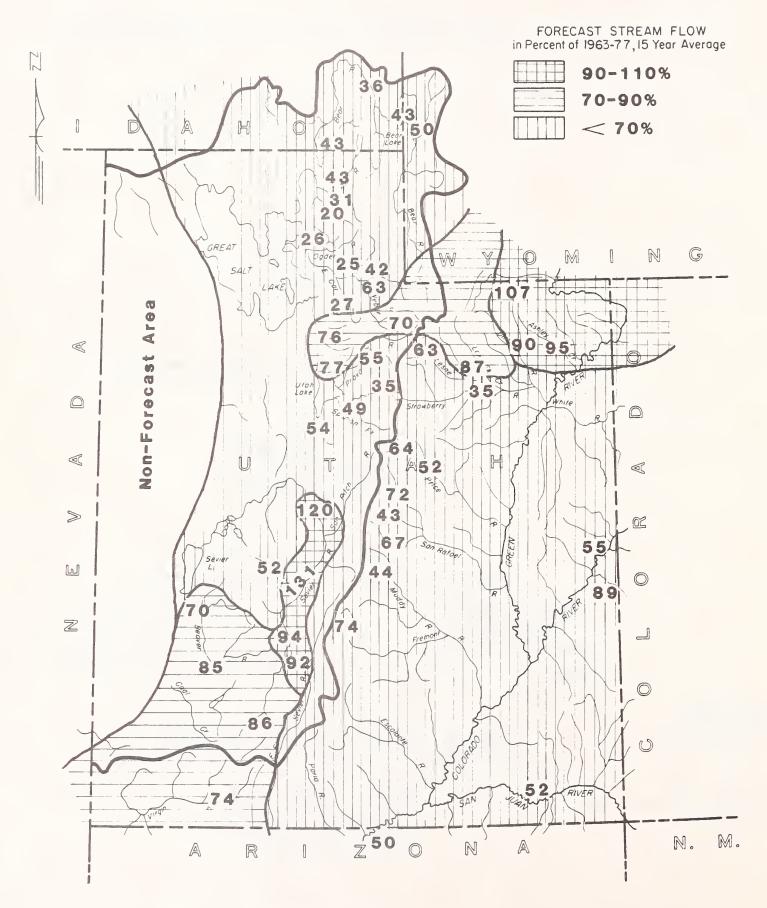
JOAN E. OLSEN, Clerk

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION 4420 FEDERAL BUILDING SALT LAKE CITY, UTAH 84138

PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS





SNOW COVER

Snow cover now ranges from 46% of the April 1 average on the Lower Bear River to 109% on the Uintah-Whiterocks Rivers.

Logan River snow cover is 47% of average, Ogden River 50%, Upper Bear 63%, Weber River 64%, Provo River 71% and Strawberry River 77%.

Salt Lake front drainages are 66% of average and Tooele Valley 80%.

Uintah Basin streams are 99% on Lakefork-Yellowstone, 102% on Ashley Creek, and 84% on Blacks Fork. Snow cover on Price River is 53% of average, San Rafael 59%, Muddy 65%, Fremont 74% and the head of the Escalante 105% of the April 1 average.

Sevier River snow cover ranges from 66% on the South Fork to 75% on the East Fork and 70% on the Lower Sevier and San Pitch.

Beaver River is 81%, Coal Creek 66%, and Virgin River 62% of average snow cover.

The Blue Mountains are 69% and the LaSal Mountains are 108% of the April 1 average.

PRECIPITATION

Precipitation at mountain stations ranged from 60 to 100% of average on the Lower Bear during March to 150 to 300% on the Uintahs and the rest of the state. The October-March totals now range from 40 to 70% of average on the Lower Bear to 60 to 116% in Uintah Basin. The rest of the state is mostly 50 to 90% of the 15 year average for the October-March period.

SOIL MOISTURE

Soil moisture under the snow pack is still drier than normal due to below average moisture prior to snow accumulation.

WATER SUPPLY OUTLOOK (continued)

RESERVOIR STORAGE

Reservoir storage in 26 of Utah's key irrigation reservoirs is now 118% of the 15 year average and 85% of capacity. All reservoirs are expected to fill except Pineview and Strawberry where very low inflow is forecast.

STREAMFLOW FORECASTS

Streamflow forecasts for the April-July period range from 14% of average on the Woodruff Creek to 131% on the Sevier for the inflow Sigurd to Gunnison.

Bear River is forecast 82% at Utah-Wyoming State Line, 58% at Woodruff, 41% at Randolph, and 36% at Harer, Idaho. Smiths Fork is forecast 50%, Thomas Fork 43%, Big Creek 16% and Woodruff Creek 14% of average, Cub River 43%, Logan River 43%, Blacksmith Fork 31% and Little Bear 20% of average.

Ogden River is forecast 21% for the South Fork and 26% for Pinview inflow. Weber River is forecast 70% at Oakley, 63% at Wanship, 54% at Coalville, and 39% at Gateway. East Canyon is forecast 27%, Lost Creek 25%, Chalk Creek 42%, Hardscrabble 45%, and Farmington Creek 55%.

Provo River is forecast 68% at Hailstone, 55% at Deer Creek Dam, and 68% for Utah Lake inflow. American Fork is forecast 77%, Hobble Creek 43%, Spanish Fork 49%, and Payson Creek 54% of the 15 year average.

Streams above Salt Lake City are forecast 45% for Emigration Creek to 79% for Little Cottonwood Creek. Tooele Valley forecasts range from 50% of average for Vernon Creek to 69% for South Willow Creek near Grantsville. Settlement Creek is forecast 55% of average.

Uintah Basin forecasts range from 35% of average on Strawberry River to 107% on Henrys Fork. Currant Creek is forecast 37%, Duchesne at Tabiona 64%, Rock Creek 73%, Lakefork 87%, Yellowstone 84%, Uintah 84%, Whiterocks 90% and Ashley Creek 95%.

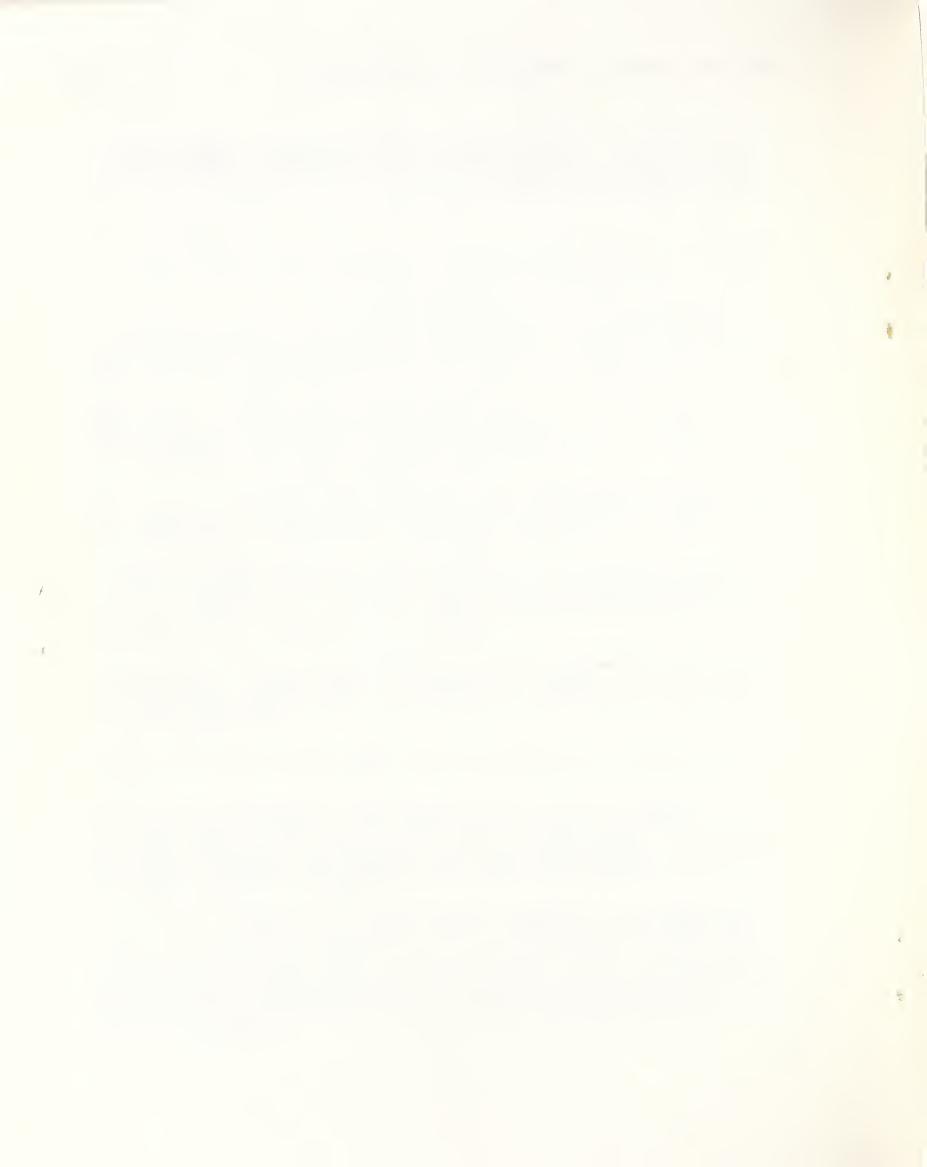
Blacks Fork is forecast 85% and Flaming Gorge inflow 56% of the April-July average.

Price River is forecast 64% for Scofield inflow and 52% at Heiner. Huntington Creek is forecast 72%, Cottonwood 43%, Ferron Creek 57%, Muddy Creek 44%, and Seven Mile Creek 74% of the April-July average. Mill Creek above Moab is forecast 89%, San Juan near Bluff 52%, Colorado at Cisco 55% and Green River 54% of average.

Sevier River's forecast 76% at Hatch, 88% at Kingston, 120% at Gunnison, Salina Creek 43%, Clear Creek 62%, Oak Creek 50%, Chicken Creek 45%, Salt Creek 23%, and Chalk Creek 52% of average. Ephraim Creek is forecast 55% and Pleasant Creek 70% of the April-July average. Beaver River is forecast 85% at Beaver, and 70% for Minersville inflow. Coal Creek is forecast 72%, Santa Clara 45%, Virgin River 74% and Lake Powell inflow 50% of the April-July average.

WATER SUPPLY OUTLOOK (continued)

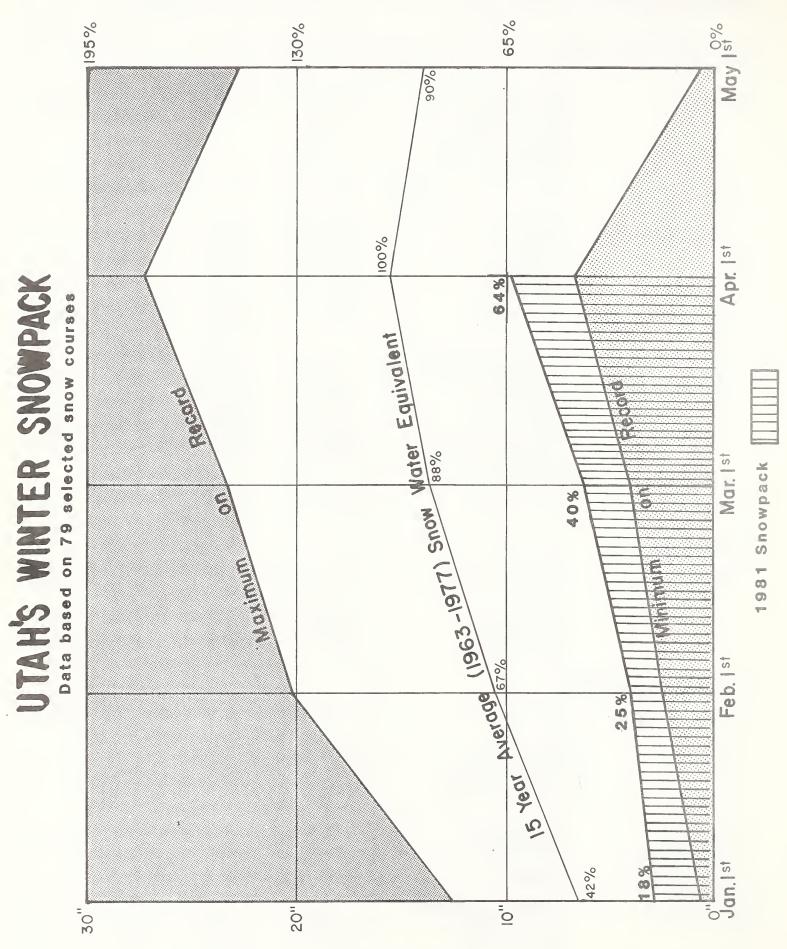
Water users with reservoir storage rights are expected to have a near average season - those depending on natural streamflow may have reduced water supplies by mid-summer.



RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

	RESERVOIR	Usable		Usable Storage	
Basin or Stream	RESERVOIR	Capacity	This Year	Last Year	Average †
GREAT BASIN					
Bear River	Bear Lake Woodruff Narrows Birch Creek Woodruff Creek	1421.0 26.5 2.2 4.0	1,067.4	1,036.2 17.5e	1,039.5
Beaver River	Minersville (RkyFd)	23.3	23.9	20.5	14.9
Little Bear Ogden	Hyrum Porcupine Causey Pineview	15.3 11.3 6.9 110.1	14.2 4.3 4.7 65.9	10.3 4.2 2.7 77.1	12.4 5.2 2.5 55.8
Provo	Deer Creek	149.7	119.5	121.5	108.7
Settlement Creek Sevier River	Settlement Creek Vernon Creek Gunnison Otter Creek Piute Sevier Bridge Panguitch Lake	1.2 0.6 18.2 52.5 71.8 236.0 22.3	0.6 0.6 18.2 52.5 70.0 230.8 20.1	0.6 0.6 18.2 52.5 50.8 192.0	16.5 37.3 49.9 146.8
Spanish Fork	Strawberry	270.0	220.2	168.5	156.9
<u>Utah Lake</u>	Utah Lake	883.9	881.0	835.7	752.0
<u>Weber</u>	East Canyon Echo Lost Creek Rockport Willard Bay	48.1 73.9 20.0 60.9 193.3	39.6 61.5 17.4 47.7 186.2	35.1 54.9 12.9 18.7 183.3	29.0 50.7 13.1 32.5 145.6
COLORADO RIVER BASIN					
Ashley Creek	Steinaker	33.3	28.0	16.7	23.4
<u>Colorado</u> <u>Green</u>	Blue Mesa Lake Powell Flaming Gorge	829.5 25,002.0 3,749.0	414.0 21,593.0 2,940.0	370.0 21,240.0 2,245.0	
Lakefork Price River San Juan	Moon Lake Scofield Navajo	35.8 65.8 1696.0	18.2 51.4 1,231.0	10.5 44.7 1,017.0	19.6 36.8
San Rafael	Huntington North Joe's Valley Mill Site	3.9 54.6 16.7	3.9 36.8 10.6	3.9 35.7 4.2	3.6 38.0
Strawberry Uintah	Starvation Bottle Hollow	165.3	152.3	49.6	127.6 10.6

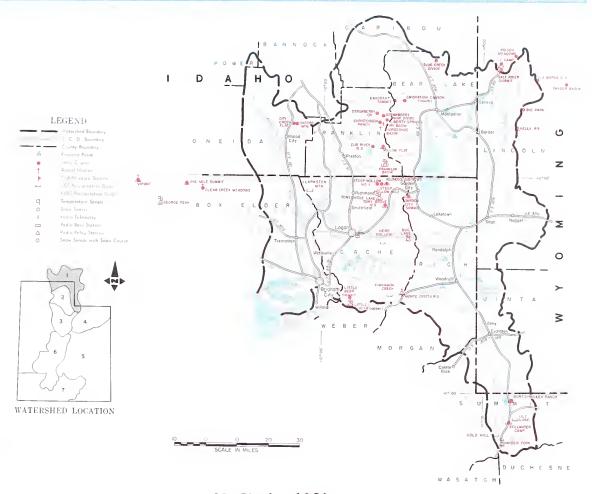
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PERCENT OF APRIL 1st SNOW WATER EQUIVALENT

BEAR RIVER BASIN in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVE E UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER improved on the upper Bear this month and is now 63% of the April 1 average. The lower Bear is only 46% of average and Logan River is 47% of average. All three areas range from 39 to 51% of the snow water content on the ground at this time last year.

PRECIPITATION at mountain stations ranged from 74 to 99% of the March average and 46 to 93% for the October-March period.

SOIL MOISTURE under the snow is drier than normal and will soak up some melt water.

RESERVOIR STORAGE is near average in all reservoirs. Bear Lake is 103% (1,067,400 acre feet), Woodruff Narrows 96% (22,800 acre feet), Hyrum 115% (14,200 acre feet), and Porcupine 83% (4,300 acre feet).

STREAMFLOW FORECASTS range from 14% (2,600 acre feet) of average on Woodruff Creek to 82% (93,000 acre feet) for the Bear near Utah-Wyoming State Line. The Bear River is forecast 58% (86,000 acre feet) at Woodruff, 41% (49,000 acre feet) at Randolph and 36% (121,000 acre feet) at Harer, Idaho. Thomas Fork is forecast 43% (15,000 acre feet) and Smith's Fork 50% (60,000 acre

feet). Logan River is forecast 43% (51,000 acre feet), Blacksmith Fork 31% (17,000 acre feet). Little Bear 20% (7,600 acre feet), and Cub River 43% (20,000 acre feet). Water users in this area without reservoir storage are expected to have water shortages by mid-summer.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

Federal Bldg. – Room 4012 Salt Lake City, Utah 841138

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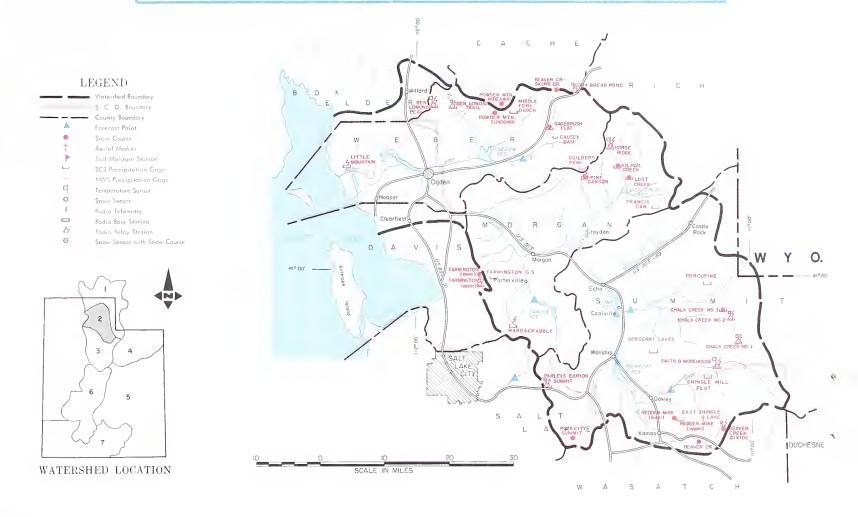






WEBER-OGDEN WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER as of the April 1st snow surveys indicate the Ogden River Basin at 50% of average and Weber Basin at 64%. The April 3rd SNOTEL update indicates good improvement by recent storms bringing the basin snow cover total up to about 73% of the April 1st average using only SNOTEL sites.

PRECIPITATION at mountain stations during March was the best it has been this year and ranged from 60 to 100% of average on the Ogden to 116 to 180% on the Weber Drainage. Heavy precipitation during March brought the October -March total up to around 50% on the Ogden and 70 to 100% on the Weber.

SOIL MOISTURE under the snow pack is still below average and is expected to reduce show melt streamflow.

RESERVOIR STORAGE is above average as a result of a good year last year. Pineview is 118% (65,900 acre feet) but is not expected to fill this year. Causey is 188% (4,700 acre feet) and Willard is 128% (186,200 acre feet). Rockport is 147% (47,700 acre feet), Echo is 121% (61,500 acre feet), East Canyon is 137% (39,600 acre feet) and Lost Creek is 133% (17,400 acre feet) and all are expected to fill.

STREAMFLOW FORECASTS now range from 21% (12,100 acre feet) for the South Fork of the Ogden to 70% (73,000 acre feet) for Weber at Oakley. Pineview Inflow is forecast 26% (30,000 acre feet). Ogden River forecasts are only a little better than 1977 low flows for the April-June period.

Other Weber River forecasts are as follows: Rockport Inflow 63% (71,000 acre feet), at Coalville 54% (67,000 acre feet), Chalk Creek 42% (16,600 acre feet), Echo Inflow 55% (88,000 acre feet), at Gateway 39% (121,000 acre feet), Lost Creek 25% (4,400 acre feet), and Hardscrabble (6,600 acre feet) 45% of the April-June average. Farmington Creek is forecast 4,500 acre feet (55%).

Water users in the area who rely on natural streamflow will have short water supplies by mid-summer. Reservoir water users will have a near average supply this year but should conserve as much water as possible to provide some carry over supply for next year.

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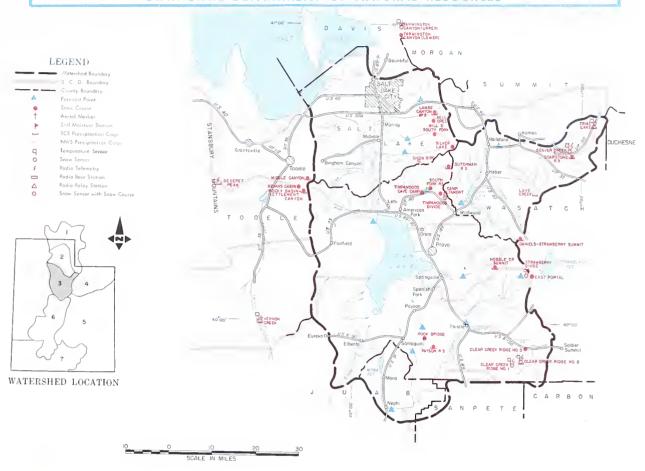
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UTAH LAKE, JORDAN RIVER and TOOELE VALLEY WATERSHEDS in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER now ranges from 66% along the Salt Lake front to 80% in Tooele Valley. Provo-Utah Lake drainage is now 71% of the April 1, 15 year average.

PRECIPITATION at mountain stations during March ranged from 92% of average at Hobble Creek Summit to 163% at Soapstone. March was the first above average month this season. The October-March total precipitation now ranges from 69% of average at Hobble Creek to 105% at Middle Canyon above Tooele.

SOIL MOISTURE under the snow pack is still drier than average although valley soils have improved with lower elevation rains.

RESERVOIR STORAGE is above average. Utah Lake is 117% (881,000 acre feet) -0.03 feet below compromise, Deer Creek 110% (119,500 acre feet), Strawberry 140% (220,200 acre feet), Settlement Creek 600 acre feet and Vernon Creek full at 600 acre feet. All reservoirs expected to fill except Strawberry where inflow forecasts are too low to make up the required storage.

STREAMFLOW FORECASTS range from 35% (18,300 acre feet) for the inflow to Strawberry Reservoir to 79% (30,000 acre feet) for Little Cottonwood Creek.

The Provo is forecast 68% (69,000 acre feet) at Hailstone, 55% (66,000 acre feet) at Deer Creek Dam, and 68% (165,000 acre feet) for Utah Lake inflow. American Fork is forecast 77% (24,000 acre feet), Hobble Creek 43% (7,500 acre feet), Spanish Fork 49% (19,000 acre feet), and Payson Creek 54% (3,400 acre feet).

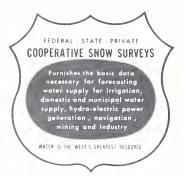
Streams along the Salt Lake front range from 45% (1,800 acre feet) for Emigration Creek to 79% for Little Cottonwood Creek. Big Cottonwood is forecast 76% (29,000 acre feet), Mill Creek 73% (4,600 acre feet), Parleys 55% (8,400 acre feet), and City Creek 53% (4,200 acre feet).

Tooele valley forecasts are 50% (500 acre feet) for Vernon Creek, 55% (1,200 acre feet) for Settlement Creek and a new forecast for South Willow Creek 69% (2,000 acre feet) for the April-July period.

Water users in this area depending on natural streamflow can expect water shortages by mid summer.

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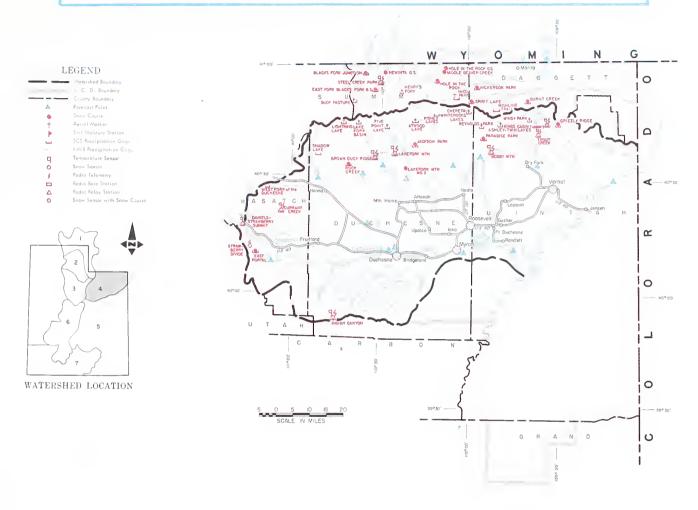
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TINGT OLICA !!

UINTAH BASIN and DAGGETT SCD's in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER improved during March and now ranges from 77% of average on Strawberry River to 109% on the Uintah-Whiterocks Rivers. Lakefork-Yellowstone drainages are 99% of the April 1 average, Blacks' Fork is 84% and Ashley Creek is 102% of the 15 year average. All basins are only 37 to 56% of last year at this time.

PRECIPITATION at mountain stations during March was above average at all stations but Currant Creek (84%). Other stations ranged from 150% at Blacks' Fork Junction to 308% at Moseby Mountain. These heavy amounts increased the October-March total to 59% at Currant Creek and 107% at Paradist Park.

SOIL MOISTURE under the snow pack is below average due to poor fall precipitation prior to snow accumulation.

RESERVOIR STORAGE is near or above average. Steinaker is 120% (28,000 acre feet), Moon Lake 93% (18,200 acre feet), Starvation 119% (152,300 acre feet), Bottle Hollow 107% (11,300 acre feet), and Flaming Gorge has 2,940,000 acre feet or a gain of about 700,000 acre feet over 6 years ago.

STREAMFLOW FORECASTS range from 35% (20,000 acre feet) for Strawberry River to 107% (56,000 acre feet) for Henrys Fork a gain of 9 to 20% since March 1.

Other forecasts are as follows: Duchesne at Tabiona 64% (68,000 acre feet), 63% (121,000 acre feet) at Duchesne, 51% (108,000 acre feet) at Myton, and 50% (132,000 acre feet) at Randlette. Rock Creek is forecast 73% (69,000 acre feet), Currant Creek 37% (7,500 acre feet), Lakefork 87% (62,000 acre feet), Yellowstone Creek 84% (56,000 acre feet), Whiterocks 90% (54,000 acre feet), Uintah 84% (74,000 acre feet), Ashley Creek 95% (49,000 acre feet) and Blacks' Fork 85% (79,000 acre feet) for the April-July period.

Some water users without storage can expect water shortages by mid-summer.

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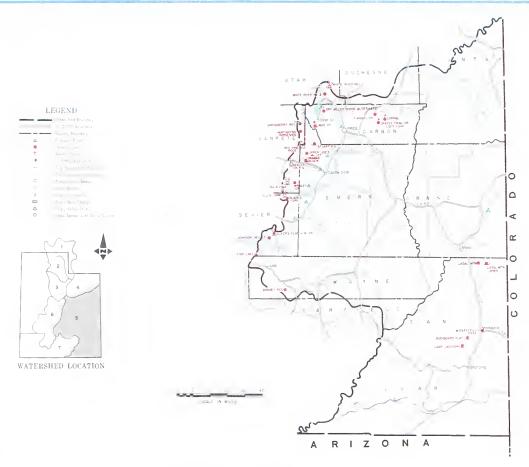
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CARBON, EMERY, WAYNE, GRAND and SAN JUAN COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER is improved and now ranges from 53% of the April 1 average on Price River to 108% on LaSal Mountains above Moab. San Rafael snow cover is only 59%, Blue Mountains 69%, and Fremont River 74% of average. These areas have only 1/3 to 1/2 as much snow water as last year at this time.

PRECIPITATION at mountain stations during March ranged from 154% of average at Mud Creek on Price River to 220% at Camp Jackson on Blue Mountains above Blanding. The October-March total precipitation is still only 53 to 80% of average for the period, after an above average March.

SOIL MOISTURE under the snow pack is still drier than normal and is expected to soak up melt water.

RESERVOIR STORAGE is above average except at Joes Valley where it holds 97% (36,800 acre feet) of the 15 year average. Scofield now holds 140% (51,400 acre feet), Huntington 108% (3,900 acre feet), and Mill Site holds 10,600 acre feet as of April 1st.

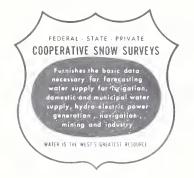
STREAMFLOW FORECASTS improved 13 to 24% of average and now range from 43% (19,000 acre feet) on Cottonwood Creek to 89% (4,500 acre feet) for Mill Creek above Moab. Price River is forecast 60% (6,000 acre feet) for Gooseberry Creek, 64% (23,000 acre feet) for Scofield inflow, and 52% (33,000 acre feet) at Heiner for the April-July period. Huntington Creek is forecast 72% (33,000 acre feet), Ferron Creek 57% (19,400 acre feet), Muddy Creek 44% (7,400 acre feet), and Seven Mile Creek near Fish Lake 74% (4,700 acre feet).

The Colorado is forecast 55% at Cisco, Green River 54% at Green River, and the San Juan 52% near Bluff.

Water users in this area depending on natural streamflow are expected to have reduced water supplies by mid-summer.

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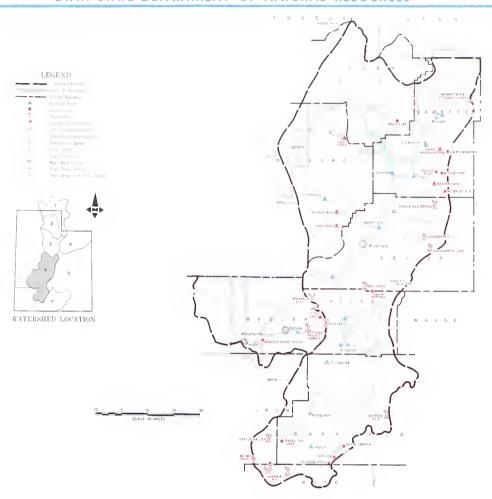
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SEVIER RIVER BASIN including BEAVER RIVER in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE
UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS AVERAGE TO WELL BELOW AVERAGE

SNOW COVER is much improved and now ranges from 67% of the April 1 average on the S. Fork of the Sevier to 81% on Beaver River. The E. Fork of the Sevier is 75% and the Lower Sevier 70% of average. All of these areas have 1/3 to about 1/2 as much snow water content as last year at this time.

PRECIPITATION at mountain stations during March ranged from near average at Pine Creek and Kimberly Mine to almost three times average for Panguitch Lake. The October-March total now ranges from 40% of average at Pine Creek to 98% at Panguitch Lake.

SOIL MOISTURE under the snow pack is still drier than average and is expected to soak up snow melt.

RESERVOIR STORAGE is well above average with all reservoirs full or expected to fill very soon.

STREAMFLOW FORECASTS range from 23% of average (2,800 acre feet) on Salt Creek near Nephi to 131% (34,000 acre feet) for the inflow Sigurd to Gunnison. Other Sevier River forecasts are as follows: 76% (31,000 acre feet) at Hatch, 86% (26,000 acre feet) at Circleville, 88% (20,000 acre feet) at Kingston, 92% (14,000 acre feet) for the East Fork, 94% (34,000 acre feet) below Piute Dam and 120% (60,000 acre feet) at Gunnison.

Clear Creek is forecast 62% (11,800 acre feet), Chalk Creek 52% (8,500 acre feet), Oak Creek 50% (700 acre feet), Chicken Creek 45% (1,400 acre feet), Ephraim Creek 55% (8,000 acre feet), Pleasant Creek 70% (5,900 acre feet) and Salina Creek forecast 43% (5,000 acre feet) for the April-July period.

Beaver River is forecast 85% (17,000 acre feet) at Beaver, 75% (10,300 acre feet) for North Creeks, and 70% (4,600 acre feet) for Minersville inflow.

Water users in this area with reservoir storage rights are expected to have a good water year. Those on natural streamflow are expected to have reduced water supplies by mid-summer unless a much wetter than normal spring occurs.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. - Room 4012

Salt Lake City, Utah 84138

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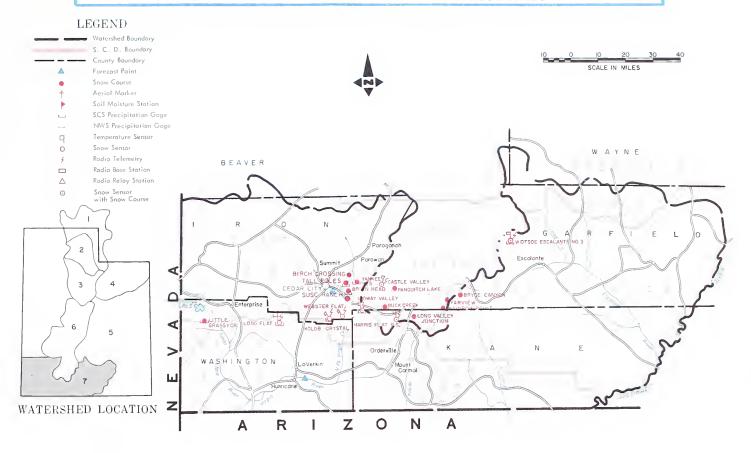


POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE AGR-101



EAST GARFIELD, KANE, WASHINGTON and IRON COUNTIES in UTAH

UNITED STATES DEPARTMENT OF AGRICULTURE-SOIL CONSERVATION SERVICE UTAH STATE DEPARTMENT OF NATURAL RESOURCES



APRIL 1, 1981

THE WATER SUPPLY OUTLOOK IS BELOW AVERAGE

SNOW COVER improved during March and ranges from 62% of average on Virgin River to 70% on Parawon Creek. The Enterprise-New Harmony areas is 63% and Coal Creek is 66% of the April 1 average. These areas have only 20 to 39% of the snow water on the ground at this time last year.

PRECIPITATION at mountain stations ranged from 46% of average at Little Grassy during March to 203% at Webster Flat. The October-March total precipitation now ranges from 63 to 85% of average.

SOIL MOISTURE under the snow pack is still drier than average and is expected to soak up snow melt.

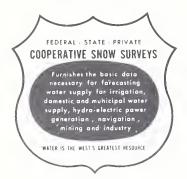
RESERVOIR STORAGE is reported as good.

STREAMFLOW FORECASTS now range from 45% (3,600 acre feet) for the Santa Clara near Pine Valley to 74% (36,000 acre feet) for the Virgin near Hurricane. Coal Creek is forecast 72% (12,000 acre feet), and Lake Powell inflow 50% (3,500,000 acre feet) for the April-July period.

Water users depending on natural streamflow are expected to have reduced water supplies by mid-summer in this area.

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE Federal Bldg. - Roam 4012 Salt Lake City, Utah 84138

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR-101



INCT ALAG LANDING

NOW		THIS YEAR		PAST	RECORD	PRECIPI	TATION	(Inches	/		
ORAINAGE BASIN and/or SNOW COURSE NAME	Data of Survey	Snow Depth (Inches)	Water Content (Inchas)	Water Con	Average +	Date of Reading	Month's Precipitation	AYerage +	This Year	Average +	Percent of Average
			Ī			Nacouni,	- Treetprisitor	<u> </u>	T		Average
GREAT BASIN											
UPPER BEAR RIVER (Above Harer, Idaho)											
Burts-Miller Ranch	3/29 3/30	29 31	7.0 7.5	9.3	6.1	3/29	3.89		11.10	12.00b	93
Hayden Fork Monte Cristo R.S.	3/29 3/25	47	12.5	23.0	15.9	3/29	5.56		15.94	20.06Ь	79
Salt River Summit	3/30	38	8.8	31.1	25.9 16.9	3/25 3/30	3.70 2.19	4.68	13.83	25.95 17.23	53 57
Stillwater Camp Lily Lake	3/29 3/29	37 53	7.9	15.7 18.4	11.3b	3/29 3/29	4.20 4.63a		13.66a	12.39	
LOWER BEAR RIVER (Below Harer, Idaho)											
Bug Lake Cub River R.S.	3/25 3/26	31	8.9	24.8	20.7a	3/25	1.63a		10.77a		
Emigrant Summit Franklin Basin	3/30 3/26	43	12.6	27.6	26.0	3/26	4.00a		16.72a		
Garden City Summit Klondike Narrows	3/25	24	7.1	21.1	18.5	3/25	2.65	4.25b	11.09	23.85b	46
Little Bear (lower) Little Bear (upper)	3/25	7	2.2	12.6	9.9						
Slug Creek Divide Steep Hollow #1	3/30 3/25	33 68	6.4 9.0 19.0	16.7	12.9	3/25	2.50a	2.91b	12.46a	18.13b	69
Steep Hollow #2	3/25	44	14.3	42.2	38.0	0.405					
Tony Grove Lake Tony Grove R.S.	3/25 3/25	54 12	15.5 3.5	41.0 14.0	35.0a 11.9	3/25 3/25	2.19	.4.16b 2.85b	16.11a 9.07		
Willow Flat OGDEN RIVER	3/26	18	6.6	20.4	14.8	3/26	3.06	4.04	12.77	22.89	56
Beaver Creek-Skunk Creek	3/25	12	4.1	18.3	12.0						
Ben Lomond Peak Ben Lomond Trail	3/25 3/25	61 23	18.8 8.4	56.5 27.8	34.1 16.2b	3/25	3.77	6.17b 3.76b	13.74	47.13b 28.74b	48
Causey Dam Dry Bread Pond	3/25 3/25	0 25	0.0	29.5	18.9	3/25	1.84	2.31b	6.89	14.22	48
Sagebrush Flat	3/25	0	0.0	4.9	2.0	3/25 3/25	2.50a 1.57	3.88b 2.28b	10.40a 6.45	20.84	50 45
WEBER RIVER											
Beaver Creek R.S. Chalk Creek #1	3/29 3/29	19 66	5.4 16.7	14.9 30.2	7.2	3/29	6.06a	3.40b	18.74	17.70	106
Chalk Creek #2 Chalk Creek #3	3/29 3/29	52 26	12.3 7.2	19.3 11.9	15.6 7.5	3/29 3/29	4.13a 4.22	3.11b 2.68b	13.13a 12.45	16.17b	81 89
Farmington Canyon (lower) Farmington Canyon (upper)	3/25 3/25	59 67	17.5 20.5	34.0 43.1	22.4b 30.8	3/25	7.76	5.23b	19.57	27.63	71
Farmington G.S. Horse Ridge	3/25	54 34	16.0 10.6	27.3	21.9b	3/25 3/25	7.38	5.49 4.24b	20.34	29.01 23.64	70 51
Kilfoil Creek Lost Creek Reservoir	3/25 3/25	30 0	8.0	22.7	13.5b 2.0b	3/25	2.27		11.33		01
Park City Summit Parley's Canyon Summit	3/31 3/26	62 44	18.2 12.0	29.5 23.5	18.5	3/25	4.73		15.82	22.55	70
Redden Mine (lower) Smith & Morehouse	3/29 3/29	44	12.6	24.1 18.3	18.0	3/29	4.78	3.04	14.05	17.75	91
PROVO RIVER & UTAH LAKE	0,23		3.1	10.5	1	3/23	3.20	3.04	10.21	17.75	31
Beaver Creek Divide Camp Altamont	3/29	28	8.4	20.1	10.8a	3/29	4.25a		9.90a		
Clear Creek Ridge #1	3/25 3/30	34 46	12.6	28.2 27.2	13.4			5.40ь		21.20ь	
Clear Creek Ridge #2 Clear Creek Ridge #3	3/30 3/30	40	10.0	21.3	13.6	3/30	3.95	2.71b	11.75	16.06b	73
Dutchman R.S. Hobble Creek Summit	3/25	30 27	13.0	33.8	15.4 12.9	3/25 3/25	3.90	2.70	11.80	20.82	69
Payson R.S. Soapstone R.S.	3/25 3/29	34 31	10.1	24.1 19.2	18.4 11.6	3/25 3/29	3.03	2.90	12.67	17.95 16.22	71 78
South Fork R.S. Timpanogos Cave Camp	3/25 3/25	10 0	4.8	7.4 0.1	3.2					a discount	
Timpanogos Divide Trial Lake	3/25 3/29	50 64	17.2 16.3	40.2	23.5	3/25 3/29	4.50 5.35	3.36	!	25.09 23.84	79 76
				-5.5		3/23	3.33	3.//	10.17	LU.UT	/ 0

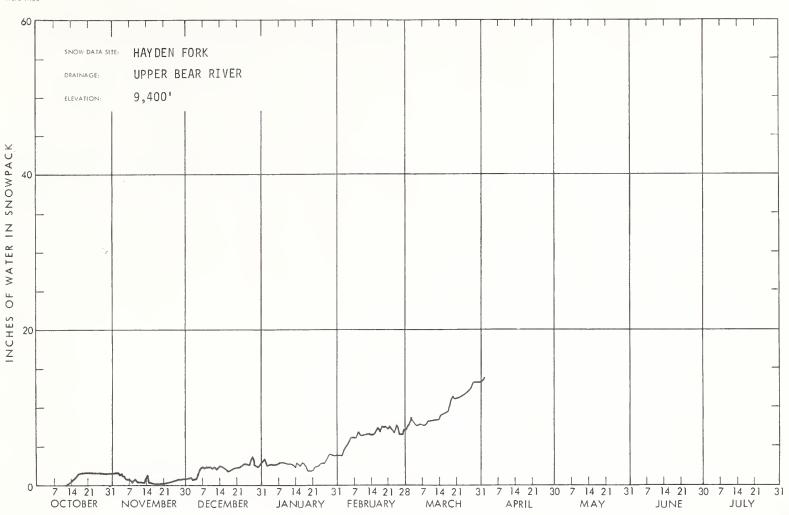
SNOW		THIS YEAR		PAST F	ECORD	PRECIPI		(Inches			70.5.77
DRAINAGE BASIN and/or SNOW COURSE NAME	Dete of Survey	Snow Depth (Inches)	Water Content (Inches)	Weter Cont Lest Year	Average †	Date of Reading	Month's Precipitation	ATION +	This Year	Average +	Percant of Average
122DAN DIVER & OPERAT CALT											
JORDAN RIVER & GREAT SALT LAKE Bevan's Cabin Lamb's Canyon #2 Middle Canyon Mill Creek Mill D South Fork	3/28 3/26 3/27 3/30 3/27	35 39 38 59 44	10.8 10.5 11.4 16.6 13.1	12.3 21.8 19.2 25.9 24.0	11.5 14.1 19.9	3/26 3/27	3.49 5.20	3.39	11.74 16.70	15.92	105
Mt. Dell Dam Rock Basin-Settlement Canyon Silver Lake (Brighton) Snowbird (Gad Valley) Vernon Creek Deseret Peak	3/27 3/31 3/27	77 57 83 28	21.7 16.3 21.2 7.2	39.8 37.2 53.8 17.3	27.1 24.9 11.2a	3/31	4.20 7.60a 5.75 3.20	2.09 4.80 2.51b	10.30	13.23 24.01b 27.18 15.27	67
UPPER SEVIER RIVER (South of Richfield, Utah)	3/31	77	22.2	33.5		3/31	7.10a		22.50a		
Box Creek	3/29	41	7.9	19.7	12.9	3/29	4.91	2.79	11.91	13.89	86
Bryce Canyon Castle Valley Duck Creek R.S. Farview	3/31 3/27 3/27 3/31	8 36 26 17	9.9 7.4 5.6	11.4 21.3 28.7 18.8	3.1 11.3 11.5	3/27 3/27	6.10 6.20	2.77 3.28b	12.73 12.99	13.89 16.53	92 79
Harris Flat Kimberly Mine Midway Valley Panguitch Lake Rainbow Point Squaw Springs	3/27 3/25 3/27 3/27 3/27 3/31 3/29	11 38 47 13 13	3.4 10.7 11.9 2.6 3.8 3.7	20.7 25.4 38.0 8.7 25.6 14.3	6.5 15.8 20.1 2.9 6.6	3/27 3/25 3/27 3/27	2.88a 4.27 4.08	3.79b 3.71b 1.38	8.61a 13.57 7.75	18.17 19.17b 7.89	75 98
LOWER SEVIER RIVER (Including San Pitch River)	., -										
Beaver Dams Farnsworth Lake G.B.R.C Headquarters G.B.R.C. Majors G.B.R.C Meadows G.B.R.C Oaks Gooseberry R.S. Mommoth-Cottonwood Creek	3/29 3/29 3/29 3/29 3/29 3/29	14 56 45 59 37 44	3.2 14.2 12.2 17.2 8.9 12.9	16.7 23.5 26.9 31.3 16.8 30.6	10.6 19.5 15.8 22.4 12.0 20.3	3/29 3/29 3/29 3/29 3/29	3.96 9.09 5.49 5.70a 4.40	2.41 4.33 4.08 1.56b 4.10 2.17 3.04b 2.75b	11.56 16.56 15.06 17.25a	13.07 19.56 18.29 8.51 21.67 11.87 12.91b 18.11	88 85 82 80 98
Middle Fork Mt. Baldy R.S. Oak Creek Pickle Keg Springs Pine Creek Ree's Flat Shingle Mill Thistle Flat Gooseberry Res.	3/29 3/29 3/30 3/29 3/25 3/25 3/31 3/29 3/29	71 59 37 43 29 34 33 46	18.7 16.4 8.4 10.9 9.4 9.3 7.4 11.4	26.3 30.8 21.6 22.9 19.7 19.1 11.2 22.8	23.4 21.8 11.5b 16.1b 15.2 12.2 8.4 15.9	3/29 3/30 3/29 3/25 3/25 3/31 3/29	8.80a 3.90 5.25a 4.40 3.23 5.45	3.14 4.94 3.10 3.60	16.80a 11.50 15.64a 9.40 10.38 13.25	16.90 13.78b 23.47 15.68	99 83 40 85
BEAVER RIVER	3/29	U	0.0			3/29	3.10a	3.60	14.00	21.71	00
Beaver Race Track Big Flat Merchant's Valley (upper) Otter Lake	3/25 3/25 3/25	51 24 37	13.5 7.2 10.1	28.4 20.0 21.9	16.1 9.7b 12.3	3/25 3/25	5.25 4.86	1.72 3.00 2.96b	13.53	8.53 15.53 14.25	87 87
PAROWAN CREEK											
Birch Crossing Brian Head Tall Poles Yankee Reservoir	3/26 3/27 3/26 3/27	9 61 30 31	2.7 15.1 8.5 7.3	13.7 30.8 27.5 14.0	5.3b 19.9b 13.8b 9.0	3/26 3/27	3.90 3.60	3.02b 2.73b	11.60 .7. 6 9	14.89b 12.13	78 63
ENTERPRISE TO NEW HARMONY DRAINAGES											
Little Grassy Creek Long Flat	3/27 3/27	0 14	0.0 4.7	8.0 15.4	2.0	3/27 3/27	1.00 4.65	2.16		14.49 11.63	
COAL CREEK											
Cedar City Golf Course SUSC Ranch	3/26 3/26	0 11	0.0 3.2	17.8	6.1b						
IBA-5CS-PORTLAND, OR 1977 M7-0-22027 D			L	L	J		1			L	1958-1972 period

SNOW		THIS YEAR			RECORD		TATION	(Inches	/	PPRCY 333	70.0.77
ORAINAGE BASIN and/or SNOW COURSE NAME	Data of Survey	Snow Oepth (Inches)	Water Content (Inchas)	Water Con Last Year	Average †	Date of Reading	Month's Precipitation	1 1	This Year	Average +	Percent of Average
COLORADO RIVER DRAINAGE											
UPPER GREEN RIVER - UTAH											
Ashley-Twin Lakes (A) Black's Fork G.SEast Fork Black's Fork Junction Buck Pasture (A)	3/29 3/29	35 32	7.3 7.2	25.2 13.6 15.1 24.0	9.0	3/29 3/29	4.53	2.43	11.81 10.53	11.94	99 91
Burnt Creek Grizzly Ridge Hewinta G.S. Hickerson Park Hole in the Rock Hole in the Rock G.S. Middle Beaver Cr. King's Cabin (upper)	3/30 3/30 3/29 3/31 3/30 3/30 3/30 3/31	22 31 37 36 35 17 18 33	5.0 7.2 8.0 8.3 6.5 4.5 3.6 8.4	7.8 17.3 15.0a 14.6	9.4 5.9b	3/30 3/30 3/29 3/31	2.60 3.60 4.22 4.24	1.51b 2.23b 2.50 1.76b	9.40 11.20 11.78 10.21	8.83b 12.78 12.56 9.41b	106 88 94 109
Reynolds Park (A)				18.5	9.8	3/31	3.92	1.90	10.42Ь	11.14	94
Spirit Lake Steel Creek Park Trout Creek Windy Park (A)	3/31 3/29 3/31	55 60 36	14.7 13.6 8.4	19.1 21.0 18.1	12.1	3/31 3/29 3/31	5.69 6.00a 3.01	2.57b 2.75b	15.85 13.80a	13.61b 20.85b	11 6 66
DUCHESNE RIVER											
Atwood Lake (A) Brown Duck Ridge Chepeta-Whiterocks	3/31 3/31	67 52	14.6 12.5	16.3 22.5 21.6	17.4a	3/31	6.09	3.41b	14.93	20.70b	72
Currant Creek Daniels-Strawberry Summit East Portal Five Points Lake (A)	3/25 3/25 3/30	2 25 26	0.3 7.6 9.0	19.2 24.7 17.8 25.9	7.7 13.7 10.9	3/25 3/25 3/30	1.80 2.30a 3.46	2.14b 2.68 2.51b	8.15 10.97 11.73	13.79b 17.81 16.73	59 62 70
Indian Canyon Jackson Park	3/29 3/31	38 54	9.5 12.4	19.7	12.0 11.5b	3/29 3/31	8.14 6.44a	1.91	14.76 12.50a	12.78 12.68	115 99
Lakefork Basin (A) Lakefork Mountain Lakefork Mountain #3 Lightning Lake (A)	3/31 3/31	42 20	9.9	22.9 19.1 14.4 34.2	10.6	3/31	5.28	2.08	12.98a	12.62	103
Mosby Mountain Paradise Park Rock Creek Ranch Strawberry Divide	3/31 3/31 3/31 3/30	34 52 21 49	8.4 14.1 5.8 13.6	18.7 19.3 12.3 27.3	8.6 11.8 5.8 18.5	3/31 3/31 3/31 3/30	4.53 5.34a 4.54 3.25a	1.47b 1.78b	12.15 14.20a 9.94 15.37a	12.00 13.05 11.04	101 109 90
PRICE RIVER											
Dry Valley Divide Alternate Mud Creek White River #1 White River #3	3/30 3/29 3/30 3/30	12 26 33 4	2.5 7.8 8.0 0.6	16.9 23.1 20.1 13.8	12.3 12.8 6.1	3/29 3/30	3.95 4.06	2.56	9.30 10.55	14.25 13.22	65 80
SAN RAFAEL RIVER											
Buck Flat Huntington-Horseshoe Orange Olsen Red Pine Ridge Seeley Creek R.S. Stuart R.S.	3/29 3/29 3/29 3/29 3/29	36 50 0 34 30	9.8 17.1 0 9.1 8.4	25.6 32.3 9.3 24.2 24.0	15.4 22.7 16.5 16.0	3/29 3/29 3/29	4.47 2.10 4.90 3.25	1.01b	4.75 14.16 8.53	7.40 19.79	67 64 72
Upper Joe's Valley Wrigley Creek	3/29 3/ 2 9 3/29	4 15 24	1.1 4.3 7.2	16.8 17.2 19.6	6.5 9.5 10.1	3/29	3.15		7.02	11.62	60
MUDDY RIVER	0,23	log T	1.6	10.0	10.1						
Black's Fork Dill's Camp	3/29 3/29	31 22	8.8 5.8	20.1	12.6 11.4	3/29	4.09		10 21	14 405	7.0
FREMONT RIVER	-,		0.0	20.2	11.7	3/23	7.∪3		10.31	14.40b	72
Black's Flat-U.M. Creek Fish Lake Johnson Valley Donkey Res	3/29 3/29 3/29 3/28	26 21 11 30	7.1 5.6 3.0 6.9	16.8 10.6 12.4 14.8	10.4 7.0 6.1 6.9			2.46b 1.68	8.91 7.29	12.10b 9.18	74 79
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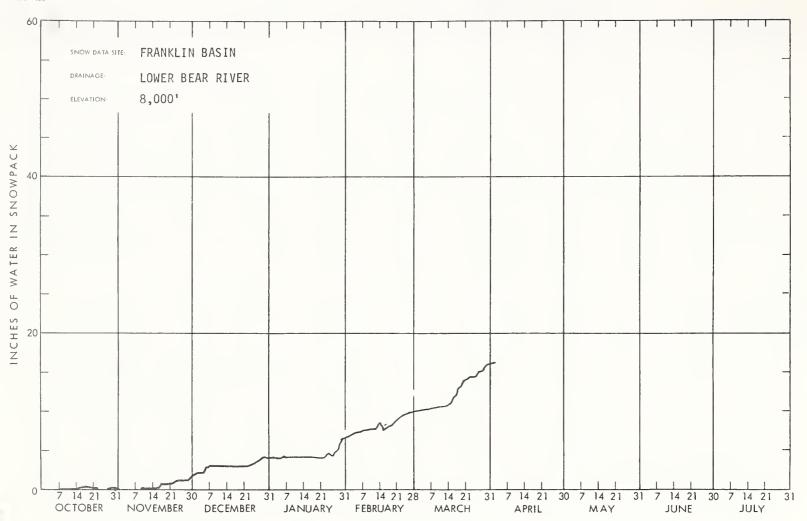
W		THIS YEAR		PAST R	ECORD (inches)	PRECIPI	ALIUN	(Inches)		PPROX. OCT	TO DA
DRAINAGE BASIN and/or SNOW COURSE NAME	Data of Survey	Snew Depth (Inches)	Water Content (Inchee)	Last Year	Average T	Data of Reading	Month's Precipitation	Avarage +	This Year	Average +	
SOUTHEASTERN UTAH DRAINAGES											
Buckboard Flat	3/26	28	7.8	23.3	11.7	3/26	5.72	2.96	12.81	18.14	
Camp Jackson	3/26	25	7.7	26.6	10.8	3/26	5.51	2.51	8.93	16.78	
LaSal Mountain (lower) LaSal Mountain (upper)	3/31 3/31	29 57	9.4 16.4	19.8	8.6 15.3	3/31	7.98a	3.14	16.50a	14.18	1
Monticello City Park	3/27	0	0.0	0.1a							
ESCALANTE RIVER											
Widtsoe-Escalante #3	3/27	42	10.4	20.3	9.9	3/27	6.13	2.40	12.45	12.07	1
/IRGIN RIVER											
Kolob-Crystal Long Valley Junction	3/26 3/27	47 1	13.5 0.2	39.0 14.7	21.8a 2.7	3/26	9.20a		17.00a		
Webster Flat	3/27	39	12.4	33.5	15.7	3/27	8.10a	4.00	16.28	19.15	
a - Partly Estimated											
b - Average of past record + - 1963-77 15 year average	in avera period	ge perio	d - less	than 15	years						
() - Aerial Marker Reading											
				İ							
									- 4		

+ 1958-1972 period

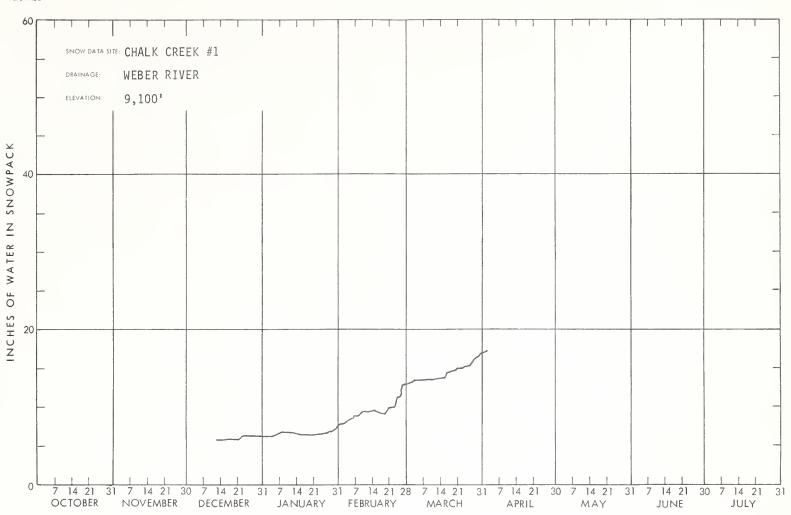


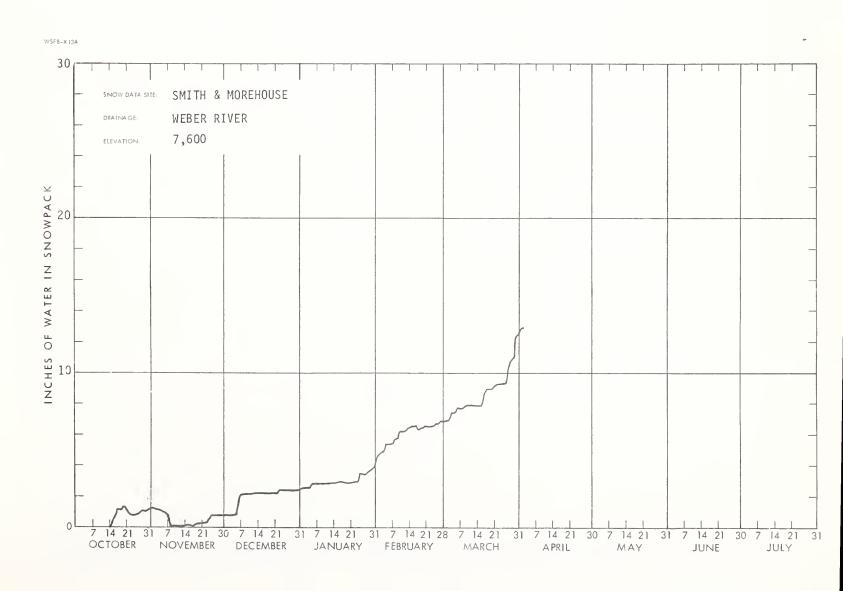




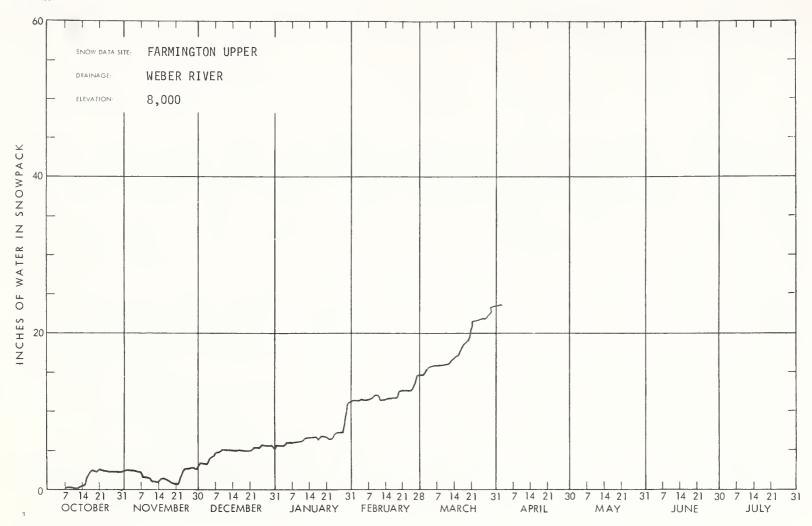


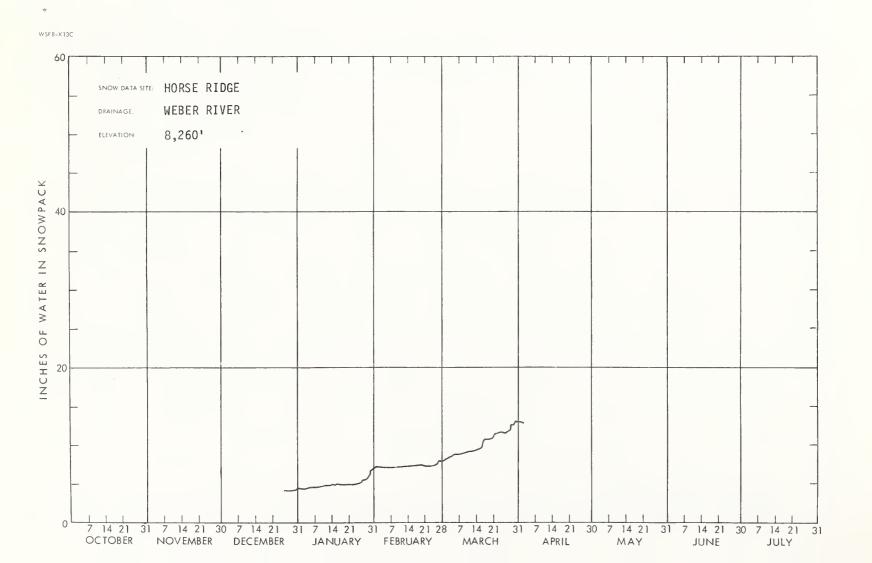


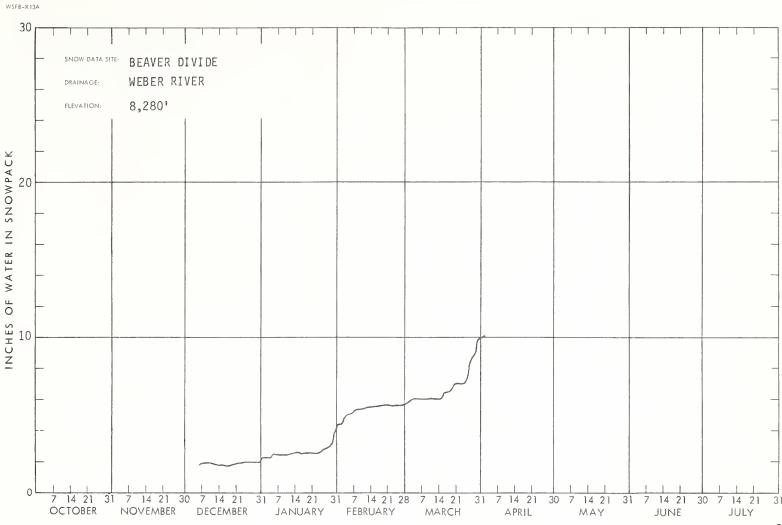


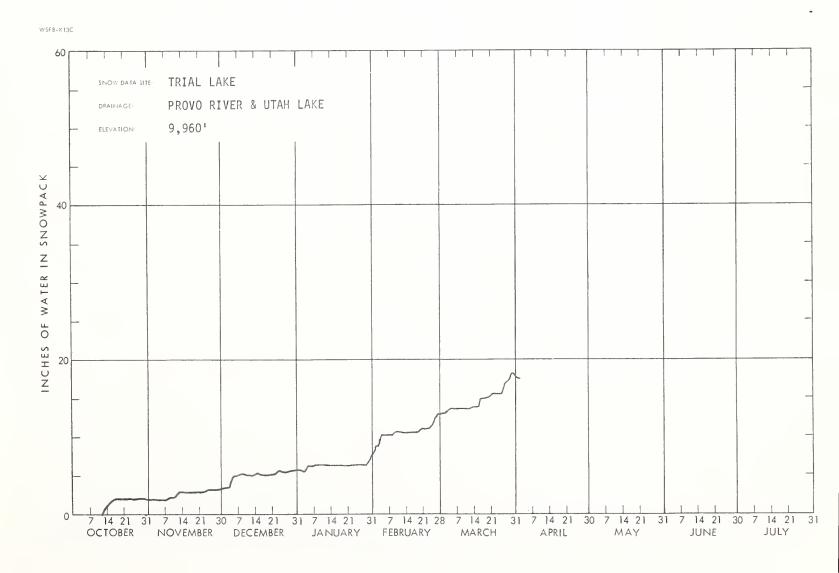


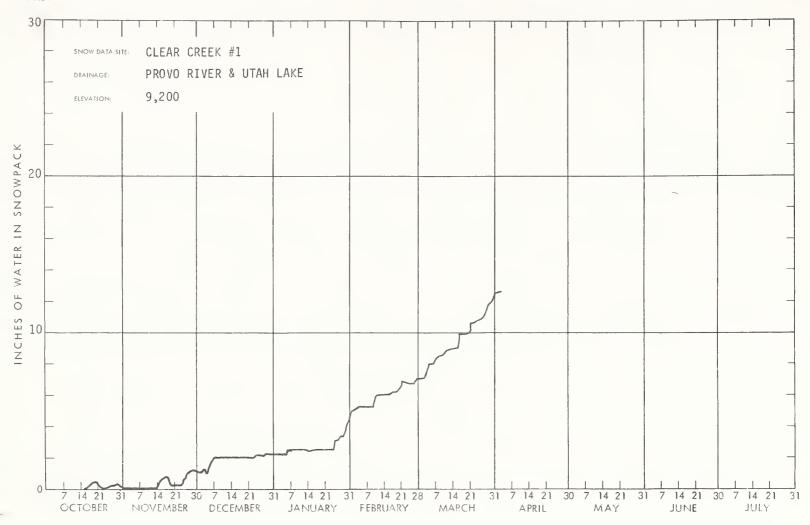
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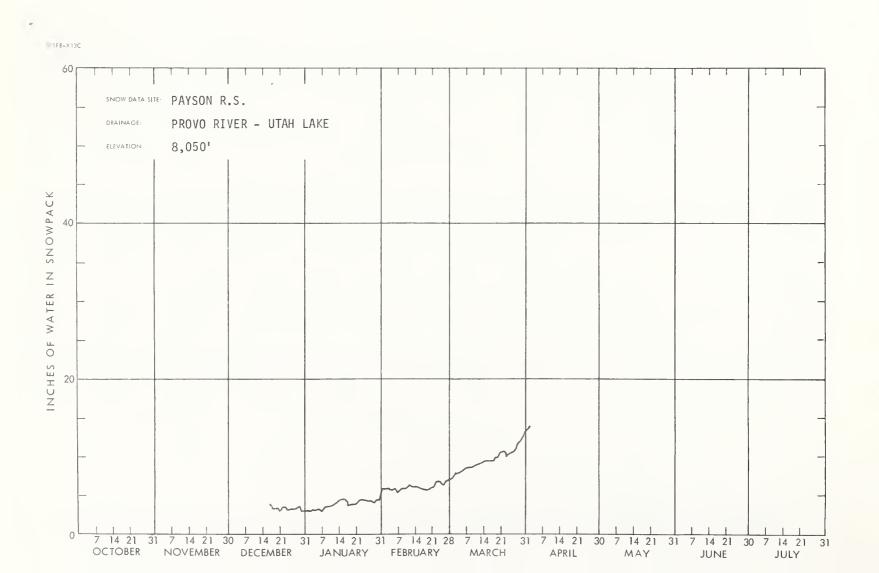


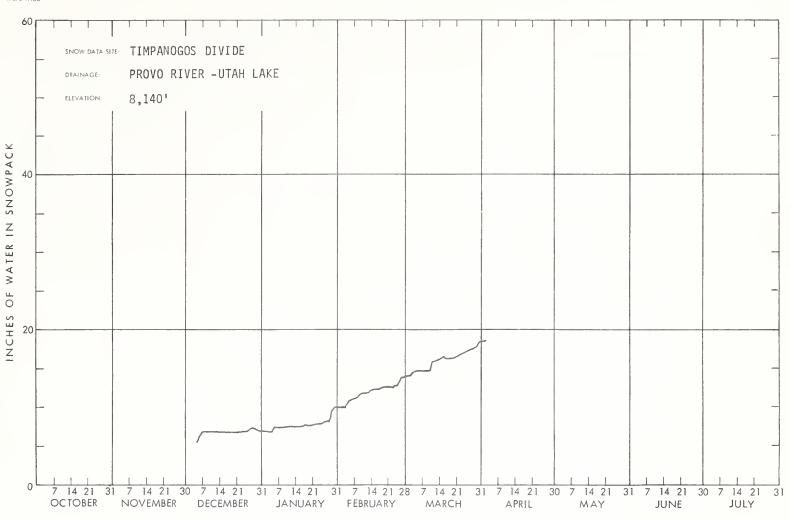


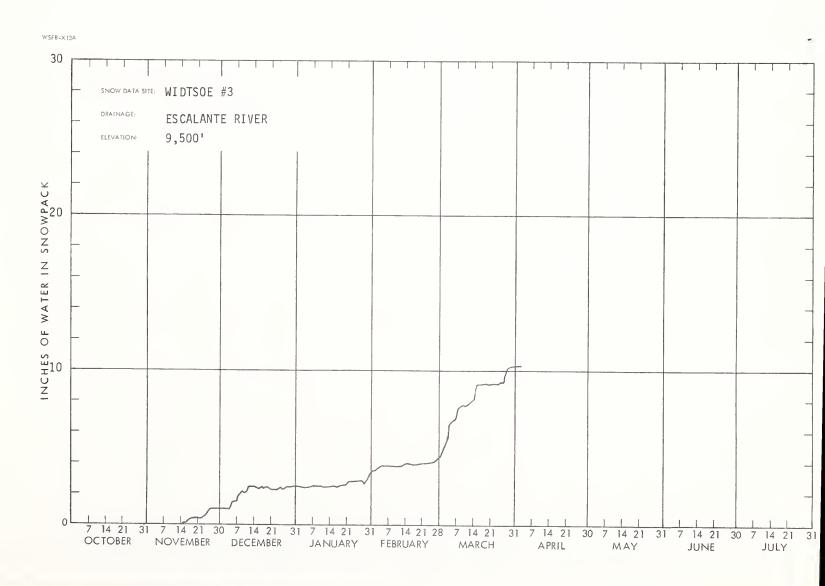


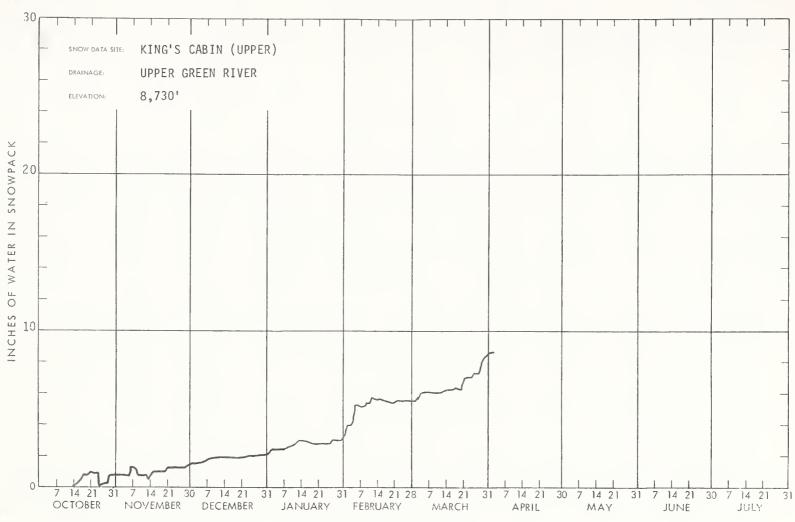


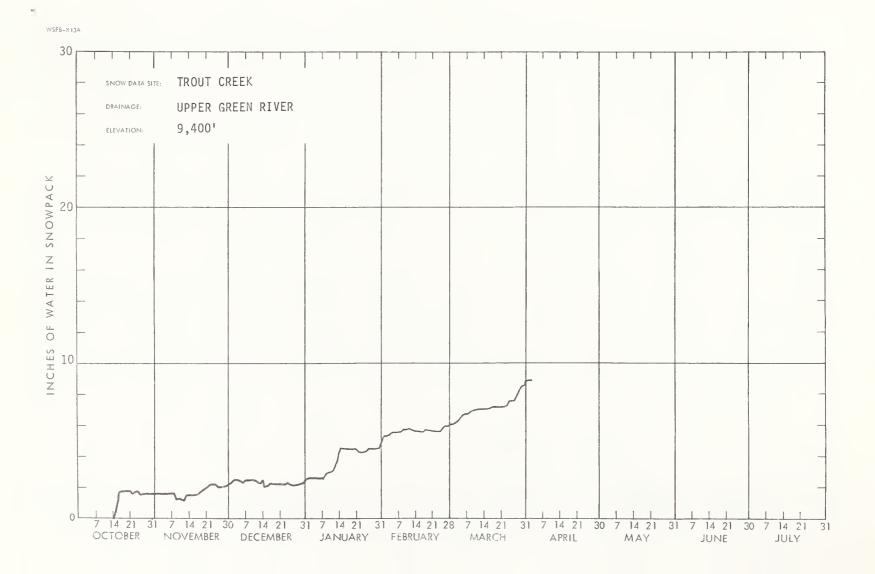


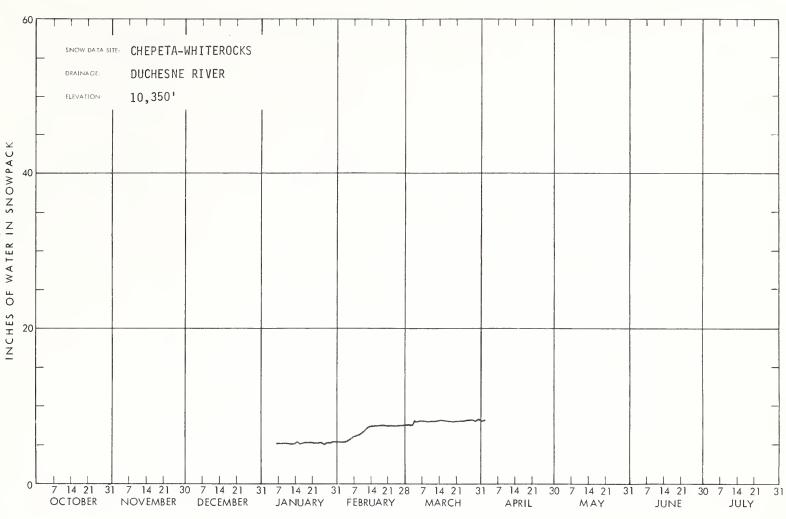


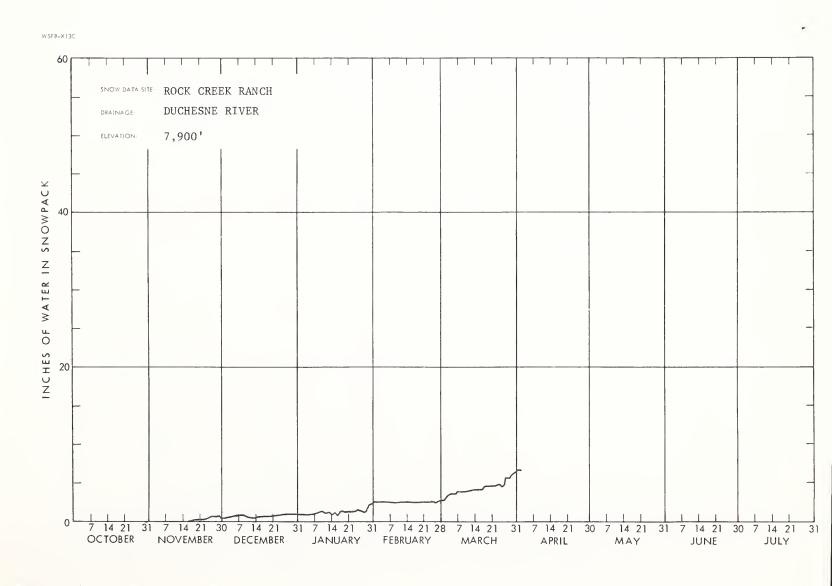


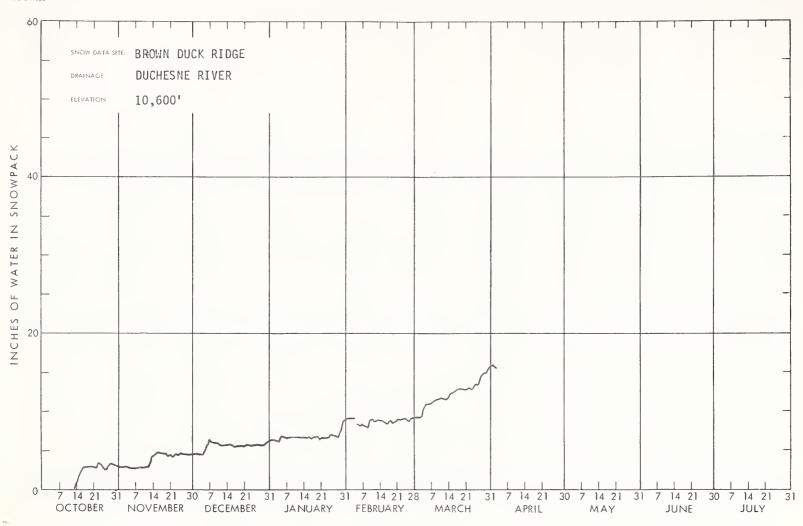


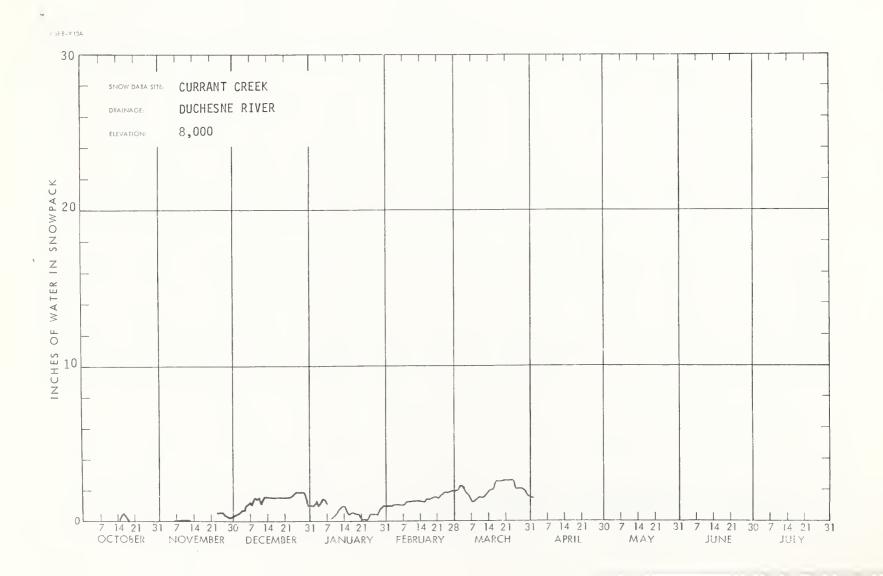


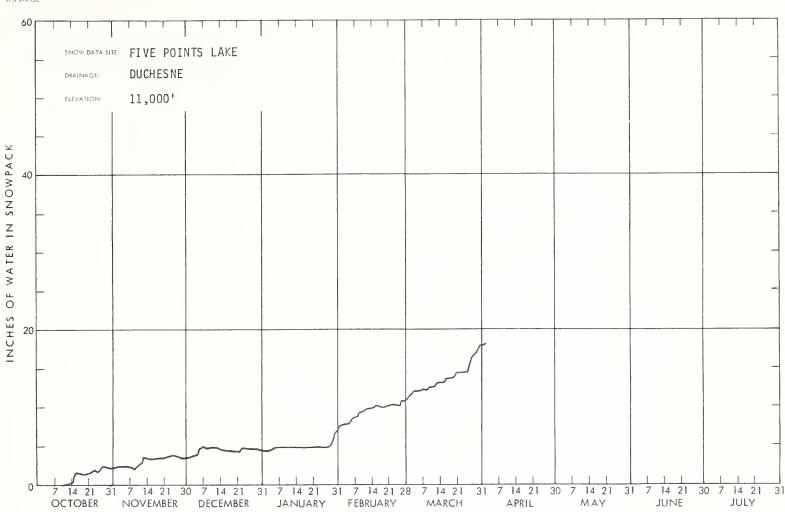


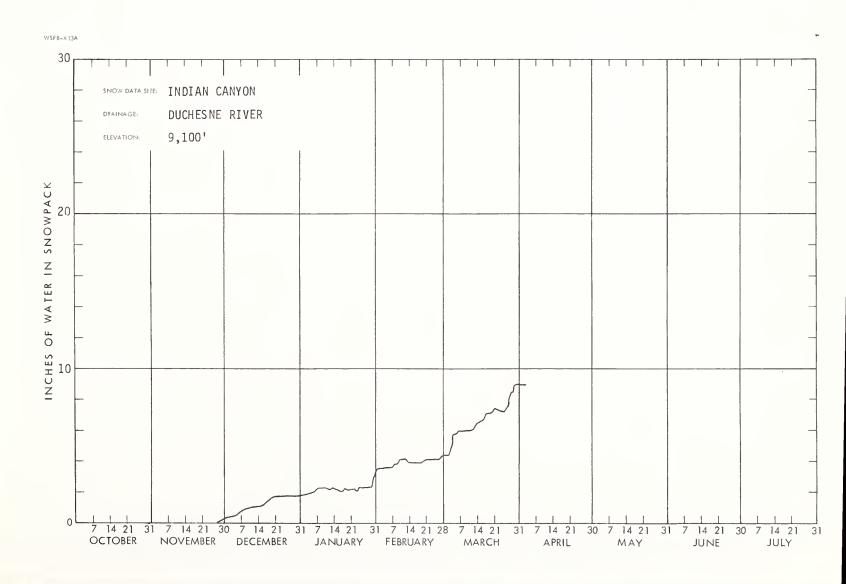


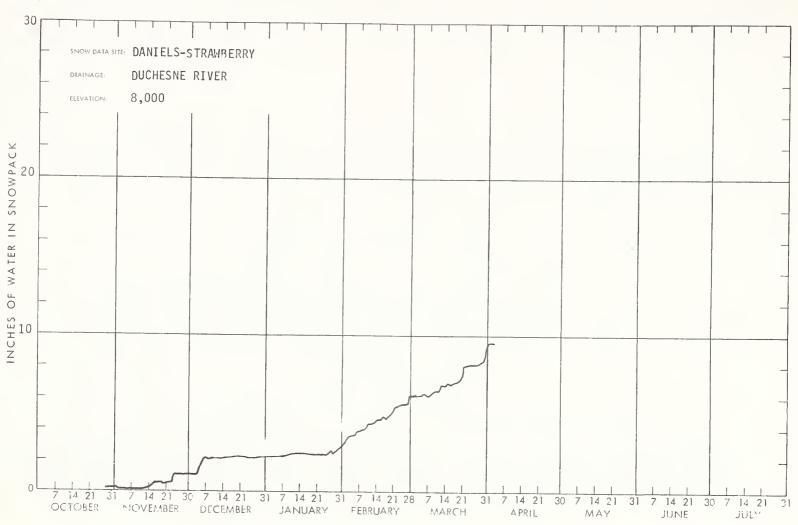


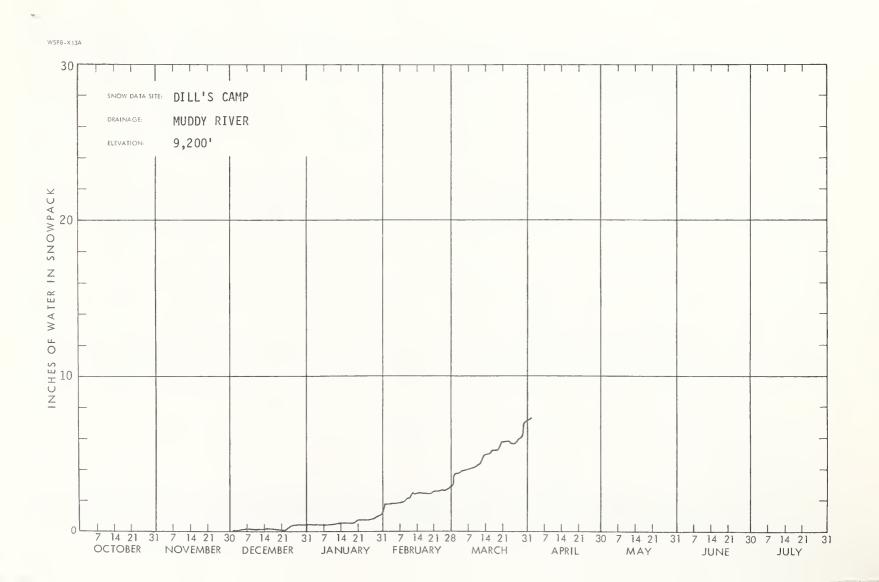


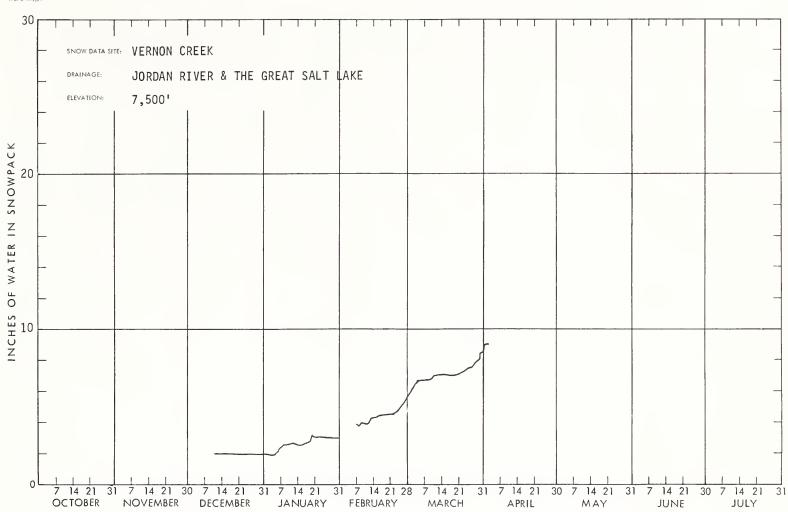


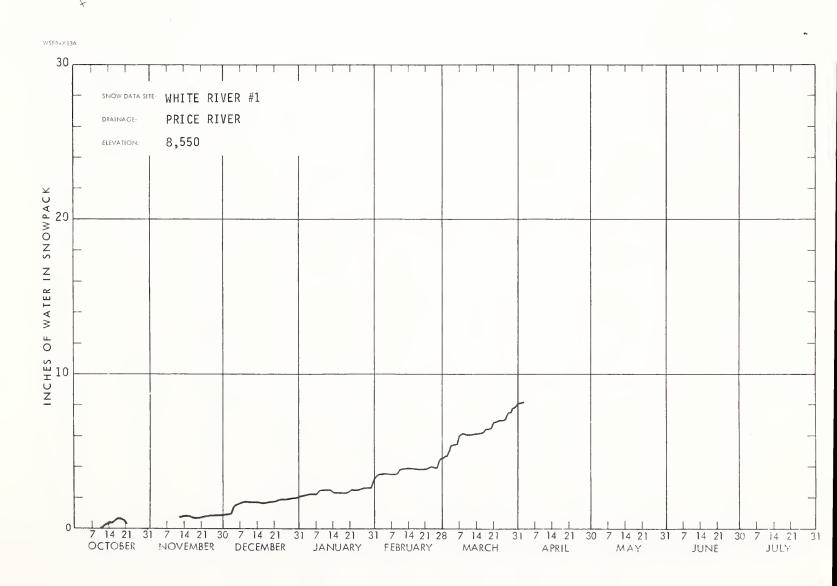




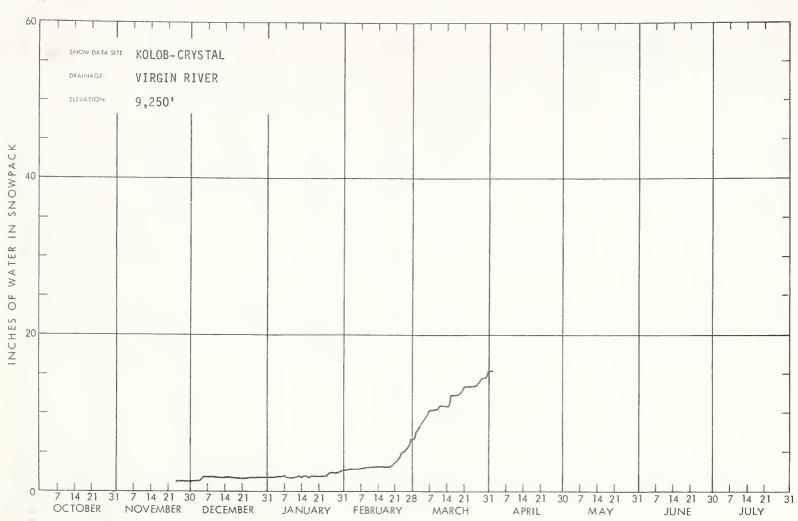


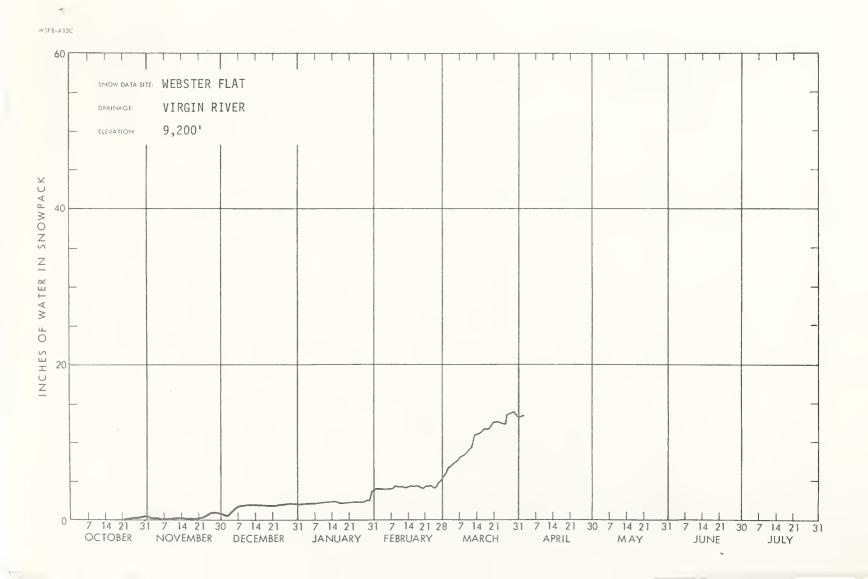


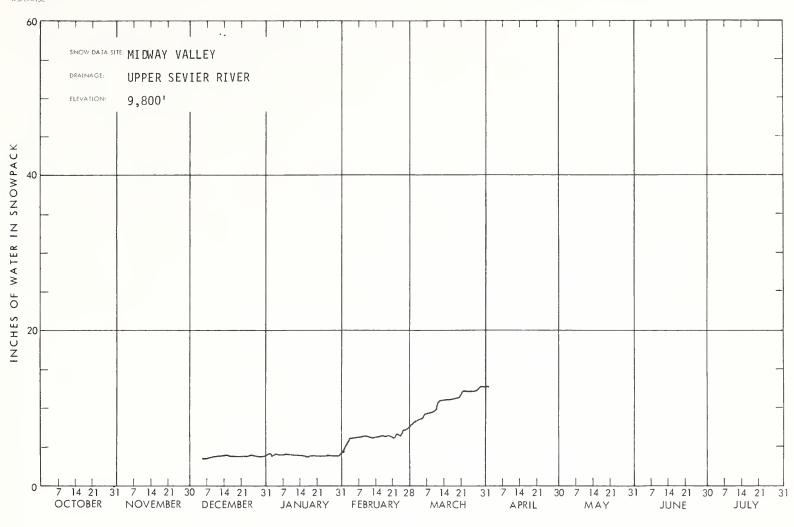


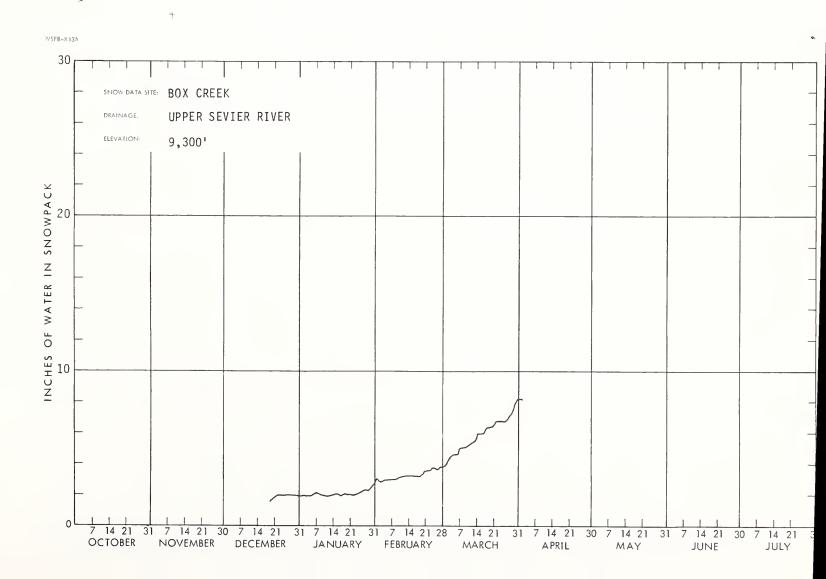


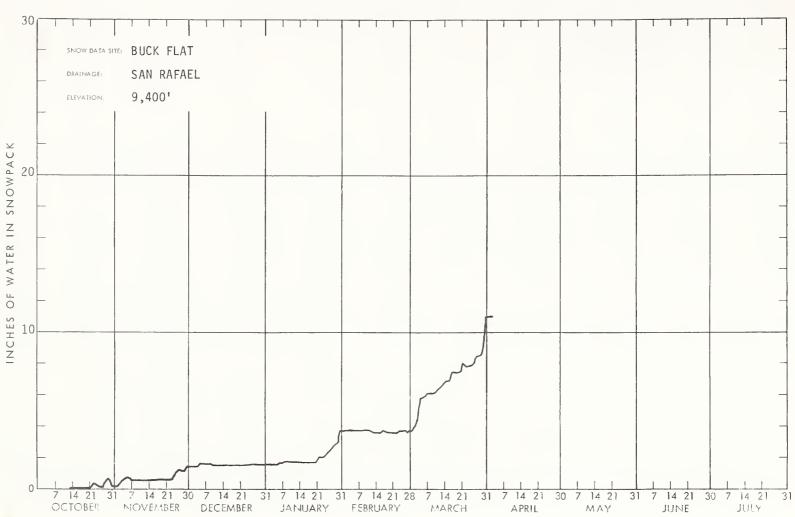


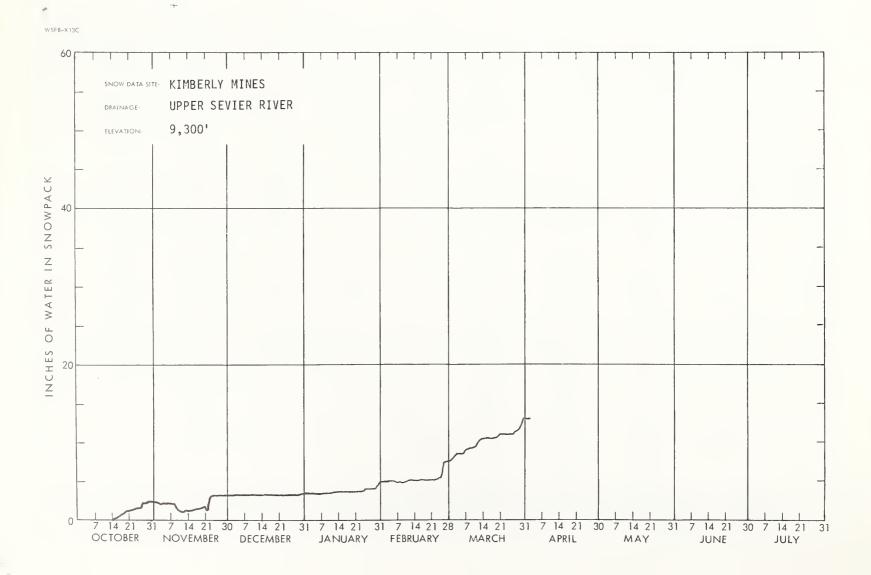


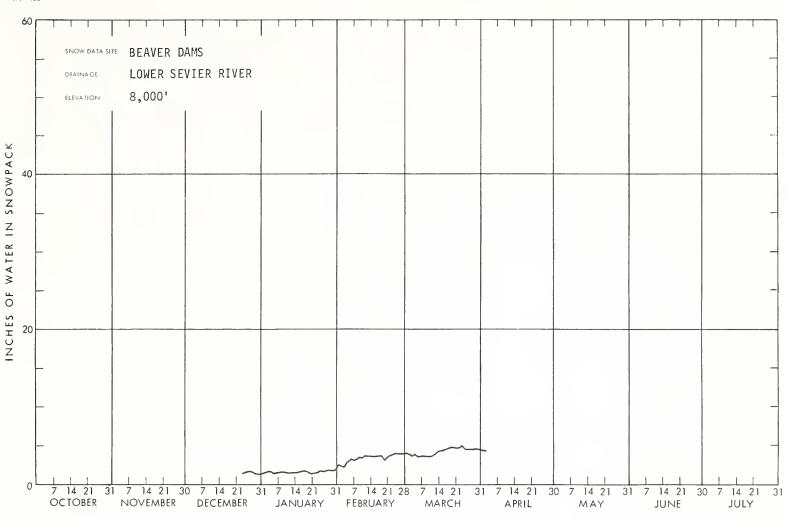


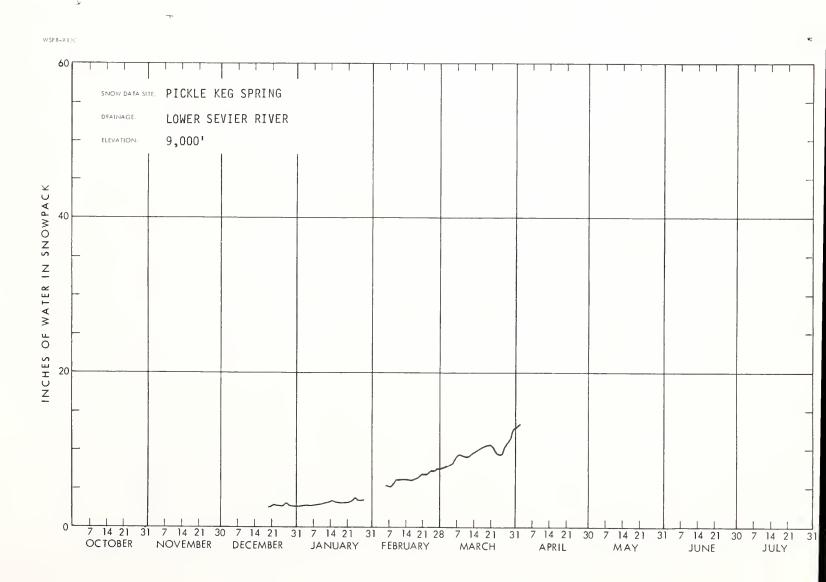


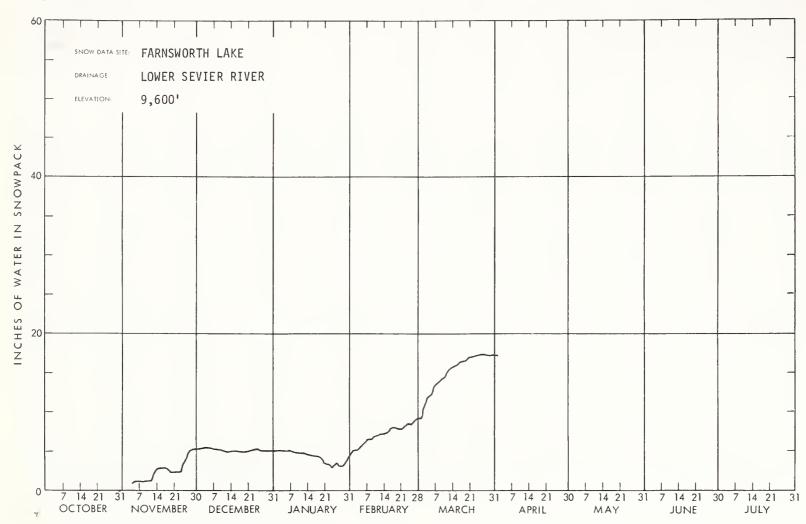


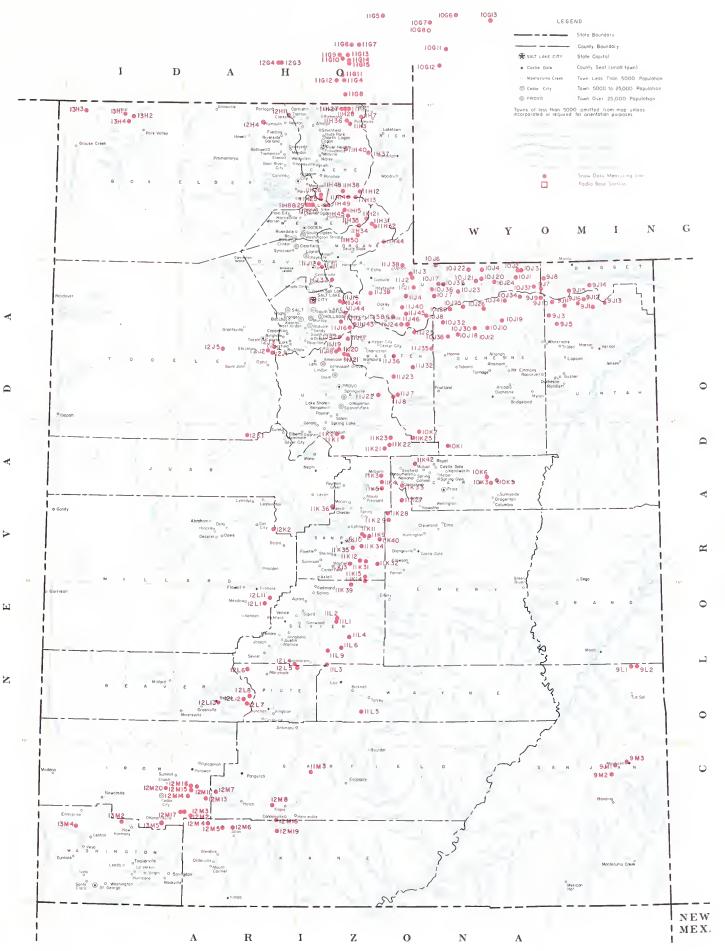














SNOW COURSES AND RELATED DATA MEASURING SITES

UTAH

1981



INDEX TO UTAH, BEAR & UPPER COLORADO RIVER BASINS

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Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

- U. S. Department of Agriculture Soil Conservation Service Forest Service
- U. S. Department of Commerce NOAA, National Weather Service
- U. S. Department of Interior
 Water and Power Resources Service
 Geological Survey
 National Park Service

STATE AGENCIES

Utah State University
Utah State Department of Natural Resources
Division of Wildlife Resources
Division of Water Resources
Division of Water Rights
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner

MUNICIPALITIES

Manti Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Central Utah Conservancy District
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association
Weber River Water Users Association
Weber Basin Conservancy District

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FEDERAL BLDG. -- ROOM 4420 125 SOUTH ST. SALT LAKE CITY, UTAH 84138

OFFICIAL BUSINESS PENALTY FOR PRIVATE USE, \$300





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"The Conservation of Water begins with the Snow Survey"